From: Oren Ben-Kiki

To: 'microsoft.atr(a)usdoj.gov'

Date: 11/18/01 9:02am **Subject:** Micrososft Settlement

I'm not a USA citizen. This means I can't write "my congressman" when it comes to issues like the Microsoft trial. However I'm very much dependent on the results of this trial. I take the liberty of writing to you in the hope that foreign citizens have an equal standing - or at least some standing - at the current state of affairs.

I've been working as a paid computer professional ever since 1983. I've seen and used many operating system and companies come and go. And I don't like the trend which has been set by Microsoft's operating systems.

There are many cases where there is a "natural synergy" between two services, but this synergy is still a bad thing. It happens every time there is "infrastructure" vs. "application". Infrastructure being a "natural monopoly", this allows the infrastructure company a monopolistic lock on the related application market.

In phone communication this is the actual wiring of houses vs. the actual end-point equipment (phones, office switchboards). Imagine only being able to buy an AT&T phone.

In cable TV it is the wiring vs. the set-top boxes and channels. I heard that France has managed to avoid the usual unhealthy synergy there. The cable company there serves a similar role to that of a phone company. It must distribute anyone's content (for a fee, of course), just like a phone company is bound to allow anyone to make a phone call with any content. This allowed a healthy competition in conent creation, where everywhere else one is bound to a single channels provider together with the physical cable.

In computers, the "infrastructure" and "application" may seem less well-defined (but see below). The principle still stands, however. An unhealthy synergy between hardware and operating system was the hallmark of the monopolistic IBM era. Today decoupling them is taken for granted, allowing a healthy competitive market place - for hardware.

The relationship between an "operating system" and "the applications" is the same as in all the above cases. There is a technical synergy, that's correct. But as in all the above cases, taking the easy way of mixing them together ends in an inefficient market place and inferiour, over priced products.

The solution is the same, in principle, for all the above cases. A company may choose to be in the infrastructure business. Its products must be well-documented and open for use by anyone. This means anyone could duplicate the infrastructure (usually at a large cost) and hence profit

margins are low - but the market is large. A company may also choose to be in the applications business. Its products may be closed, proprietary, and next to impossible to duplicate. Hence margins are high, but the market is smaller. An infrastructure company must focus on stability and standards. An application company must focus on innovation and tailored solutions.

It is impossible for a company to be both. It is simply too lucrative to corrupt the infrastructure (the low margin operation) for a specific application (the high margin operation). This naturally discriminates against other application companies. Publishing the infrastructure details doesn't help, either. The simple fact is that one company is able to change the infrastructure to fit its applications while all others must fit their applications to fit someone else's infrastructure.

In short, the only viable solution to the problem is to break Microsoft into two separate companies. One which makes "infrastructure", and one which makes "applications". Note that infrastructure isn't necessarily "operating system". Microsoft has invested a lot of effort in destroying the original, clean definition of what "operating system" means as opposed to "an application". For the purpose of the separation, "software infrastructure" is "any piece of software which monopolizes the use of resources in a computer or a network". These may be hardware resources or software resources (such as network addresses).

The monopolistic software infrastructure company must publish the full interface to its products. Any such company should fall under similar legistlative restrictions to those of utilitity companies - the electric company, the phone company etc. The application software company would be free of such chains.

Any other solution won't address the core issues. Forcing Microsoft to publish all infrastructure details - including file formats, network protocols, and APIs - is better than nothing, but is a band aid solution where a surgeon scalpel is called for.

Note that this solution is not against Microsoft's own interests. One argument against a split was that the combined worth of the two companies would be greater than the worth of the current Microsoft (as in the AT&T case) - and what sort of a "punishment" is that? This argument proves that the current mixture of infrastructure and application is harming Microsoft's share holders as well as its customers. The fact it may very well be profitable to split the company is proof that the only reason not to is the resulting loss of power by the few people leading Microsoft today. In fact these people have broken the law in the process of obtaining and wielding this power. Therefore splitting the company makes perfect sense. It would exactly "punish" the power-seeking few (by taking away their power), while benefiting (financially) everyone else.

Thank you for your time,

Oren Ben-Kiki oren@ben-kiki.org